REMARKS/ARGUMENTS

1. Introduction

This is a full and timely response to the Office action of April 23, 2007. Claims 1-20 have been amended and distinctly pointed out between the instant claims and cited

5   references. No new material has been introduced and reconsideration of the application is respectfully requested.

2. Amendments to the specification

Please accept the above amendments to the specification. Paragraphs [0007] and [0018] are being amended merely for grammatical reasons, amendments to paragraph

10   [0024] are supported by Fig.2, and amendments to paragraph [0031] are supported by Fig.3. No new material has been introduced.

3. Claim objections

Claim 13 has been amended by removing the "|" from the limitation "a | mask

15   character value set" as required.

Claim 19 has also been amended by removing the recited term "address" and the need for pluralizing of said term.

No new material has been introduced and reconsideration of claims 13 and 19 under these objections is respectfully requested.

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4. Claim rejections 35 U.S.C. 102(e)

Claims 1-20 are rejected under 35 U.S.C 102(e) as being anticipated by United States Patent No. 6,691,168 to Bal et al., hereinafter Bal.

With support from paragraphs [0109], [0110] and Fig.4, claim 1 has been amended

25   to include the limitation of:

allowing the packet to pass through the network security apparatus according to the results of said Boolean operation.

The description on Col 12, lines 5-21 of Bal teach "the rule set has been hashed by first examining the two most significant bit (MSP) in the X dimension to select a

30   particular search tree to be used" Col. 2, lines 44-52 and Fig.8 of Bal further teach

"the output of each of the N search structures will be an R-length bit vector. In such an embodiment, the N output bit vectors are logically ANDed together to produce a final rule bit vector that is used to select the rule".

Therefore, Bal seems to teach the utilization of a Boolean operation to produce a final rule bit vector, but this vector is used to select the rule. This rule is then used to determine whether the packet is allowed to pass.

On the other hand, the present invention simplifies the procedure by allowing the result of the Boolean operation itself to directly determine whether the packet is allowed to pass. If all resulting bit values are "0", the packet requires additional consideration (Fig.8, S620, S640, S645), if not, the packet is allowed to pass (Fig.8, S620, S625, S630).

The applicant is unable to locate anywhere in known prior art the anticipation of limitation of *allowing the packet to pass through the network security apparatus according to the results of said Boolean operation* for claim 1.

Both claims 13 and 17 have also been amended to include limitations similar to (claim 13's similar limitation is shown here as an example)

for each of the specific masks, searching the corresponding binary codes for a set of M relative addresses, where M equals to the quantity of bits with a bit value of "1" in the corresponding binary codes and each relative address uniquely equals to a bit number where the bit value is "1" in the corresponding binary codes.
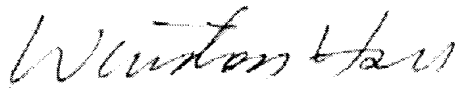
Support for these limitations can be found at least in Fig.2, Fig.3,paragraphs [0045]-[0047], and [0087]-[0089].

The applicant is unable to locate in any known reference the use of relative addresses as defined above for a hash space used to filter packets.

In addition, because the allowability of dependent claims ultimately depends upon the allowability of their respective base claims, reconsideration of all the claims is respectfully requested.

Sincerely yours,

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10   Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)